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On the Alleged Special Liability
of Benign Laryngeal Growths
to undergo Malignant De-
generation after Intra-
laryngeal Operations.

BY

FELIX SEMON, M. D., F. R. C. P.,
President of the Laryngological Society of London.

WITH AN APPENDIX

BY

DAVID NEWMAN, M. D.,
President of the Pathological and Clinical Society of
Glasgow.

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ON THE ALLEGED SPECIAL LIABILITY OF
BENIGN LARYNGEAL GROWTHS
TO UNDERGO MALIGNANT DEGENERATION AFTER
INTRALARYNGEAL OPERATIONS.

By FELIX SEMON, M. D., F. R. C. P.,
PRESIDENT OF THE LARYNGOLOGICAL SOCIETY OF LONDON.

WITH AN APPENDIX

By DAVID NEWMAN, M. D.,
PRESIDENT OF THE PATHOLOGICAL AND CLINICAL SOCIETY OF GLASGOW.

THE purpose of the following communication is to correct before the American medical profession a series of very grave misstatements made by Mr. Lennox Browne, of London, in a recent American work—viz., Burnett's *System of Diseases of the Ear, Nose, and Throat*. These statements are intended to support his views on the special liability alleged by him of benign laryngeal growths to undergo malignant transformation after intralaryngeal instrumentation.

I had hoped that the indignant protest against Mr. Browne's methods of argumentation raised by Mr. Shattock and myself in our *Sequel of a Case of Anomalous Tumor of the Larynx*, read before the Pathological Society of London, on December 19th of last year, and published

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in abstract in both the *British Medical Journal* and the *Lancet* of December 23d of that year, would have become sufficiently known in America to enable me to dispense with the very unpleasant task of exposing in America itself the fallacies and misrepresentations to which Mr. Browne has resorted. This hope, however, has unfortunately not been realized. On my return from the International Medical Congress at Rome I found a letter from an American laryngologist, Dr. Pearce, of Chicago, stating that the writer was surprised to find in Mr. Browne's article the assertion that I had changed my views, or rather that I was now included among the supporters of Mr. Browne's theories. Dr. Pearce then asked me whether this assertion was really true.

In view of this question it becomes unavoidable, I feel, in the interest of the important scientific point at issue, to ask for the hospitality of a leading American medical journal in order to expose the methods by which Mr. Browne attempts to support his ideas.

No effort will be made in the following lines to enter upon the numerous merely controversial statements contained in Mr. Browne's article.

A few stern facts will be submitted to the judgment of American readers, which can be easily verified by any one interested in this question. Not much comment will be needed, because these facts speak eloquently enough for themselves, and I shall leave the judgment as to Mr. Browne's ethics to the reader.

The charges which I bring against Mr. Browne are as follows :

1. That he has in his chapter on Deformities and Morbid Growths of the Pharynx and Larynx, in Burnett's work, when discussing the question of transformation of benign laryngeal growths into malignant ones, grossly

misrepresented the views and statements of the late Sir Morell Mackenzie, and distorted several of that author's cases.

2. That he has on the same occasion, in what he states to be an exact quotation from the report in the *British Medical Journal* of a paper of Dr. David Newman's, substituted at the crucial point an expression of his own for that used by the author, and has thereby entirely perverted the latter's statement and meaning.

3. That he has again on the same occasion not only suppressed material facts in connection with Mr. Shattock's and my own case mentioned in the beginning of this communication, but has on the strength of his suppressions grossly misrepresented my views on the question under discussion.

I.

After attempting to discredit the results of my collective investigation concerning the question of the transformation of benign laryngeal growths into malignant ones,* Mr. Browne asserts † that the late Sir Morell Mackenzie, in his essay on *Growths in the Larynx*, ‡ had arrived at very different results, and had "candidly accepted" in his one hundred cases three as "having assumed malignancy after having been treated as benign, because repeated microscopic examination by several eminent pathologists had justified their inclusion in that category."

This assertion is *absolutely untrue*. Not one word will be found on the page (page 97) of that work quoted by Mr. Browne, nor indeed in the whole work, making any such admission with regard to three of the one hundred

* *Internationales Centralblatt für Laryngologie*, etc., 1888-'89.

† Burnett's *System of Diseases of the Ear, Throat, and Nose*, vol. ii, p. 768.

‡ London, 1871. J. and A. Churchill.

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cases. On the contrary, *nine years later* Sir Morell Mackenzie, in his chief work, *Diseases of the Throat and Nose*, vol. i, 1888, has stated in the most unequivocal terms (page 317) that in his own practice he has seen one case only in which a growth originally benign afterward assumed a malignant character, and that he was not aware that there was the slightest evidence that in any one case treatment had exercised an unfavorable influence.

To enable the reader to compare Mr. Browne's and Sir Morell Mackenzie's statements, I append them here *verbatim* in parallel columns.

MR. LENNOX BROWNE.

(Burnett's *System of Diseases of the Ear, Nose, and Throat*, vol. ii, 1893, p. 768.)

"A very different experience from that of Semon may be deduced from the very frank statistics of Morell Mackenzie, for, with regard to recurrence, he relates that out of ninety-three cases treated through the fauces, six recurred which had been entirely extirpated; in three cases in which evulsion was effected the growth after a time underwent further development, and in one case the growth persisted. But this is not all. Three out of Mackenzie's one hundred cases are candidly accepted to have assumed malignancy after having been treated as benign, because repeated microscopic examinations by several emi-

SIR MORELL MACKENZIE.

(*Diseases of the Throat and Nose*, vol. i, 1890, p. 317.)

"As regards the question of the conversion of benign into malignant growths, I may mention that in my first series of growths there was one case which at first was believed to be papillomatous, but subsequently proved to be an epithelioma. In this case, the full details of which will be found in my work, the patient's throat was so irritable that only three séances were attempted, and I only once succeeded in passing forceps into the larynx. As the whole growth was subsequently removed by thyreotomy, I can not imagine that a single endolaryngeal operation should have converted a benign into a malignant growth. The whole sub-

nent pathologists had justified their inclusion in that category."

ject has recently been so ably discussed by another physician* that I can not do better than make use of his observations. While allowing that benign growths sometimes assume a malignant character in the entire absence of surgical interference, the writer calls attention in this respect to Virchow's† opinion, who admits that persistent irritation of *healthy* tissues may lead to the formation of heteroplastic growths. The author justly maintains, moreover, that the degeneration of benign into malignant neoplasms never takes place except when there is the inclination to constitutional vice, and he points out that under these circumstances the change may take place with or without surgical interference.

"He further remarks that even frequently repeated local irritation does not produce degeneration. This has been most noticeable in those cases in which, in consequence of repeated recurrence, laryngoscopic treatment has had to be recommenced *de novo* many

* London *Medical Record*, Nov. 15, 1878, p. 495. The article in question is anonymous, but I believe that the author is Dr. Felix Semon.

† *Die krankhaften Geschwülste*, Bd. i, p. 349.

times, sometimes even on four, five, or six occasions, until finally complete cure was obtained.

"In some cases of growths, especially in recurrent papillomata, I have operated from time to time for many years without ever observing any malignant degeneration. Indeed, in the many hundred cases of papillomata that have been operated on, I only know of three instances (Gibb, Mackenzie, and Rumbold) in which growths originally benign afterward assumed a malignant character. I am not aware that there is the slightest evidence that in any one case treatment exercised an unfavorable influence."

No comment is needed !

I now have to analyze the alleged three cases of conversion that have occurred, according to Mr. Browne's assertion, in Sir Morell Mackenzie's practice.

Mr. Browne says (*loc. cit.*, p. 768) :

"One case which was diagnosticated as a papilloma was that of a gentleman, aged forty-seven years, from whom Mackenzie removed several portions by the mouth, but severe stenosis following, thyreotomy was performed and the growth was radically extirpated. Six months later the patient died from malignant recurrence."

On referring to Sir Morell Mackenzie's work (*Growths in the Larynx*, p. 183) the reader will find that this case was described, not as a papilloma, but as an epithelioma by

the author himself, who concludes his description *verbatim* as follows (*loc. cit.*):

“The fact that during life it was believed to be and was treated as benign had led me to include it among these cases, and having done so before repeated microscopic examinations had succeeded in discovering any cancer elements, I did not think it fair to exclude it afterward.”

The reader will judge from this how far Mr. Browne's statements as to this case are justified.

Concerning the second case, Mr. Browne says:

“Another* was considered by Mackenzie to be a simple adenoma of specific origin and benign nature, notwithstanding that a sub-committee of the Pathological Society appointed to examine the specimen considered it a case of ‘adenoid carcinoma.’ Nevertheless the after history of the case was such that nine years later Mackenzie described and figured it as a malignant growth.”†

I need not point out that, according to Mr. Browne's own description from this case, only one conclusion can be drawn—viz., that the sub-committee of the Pathological Society appointed to examine the growth was right and the observer mistaken in their differing opinions concerning the growth. Under no circumstances had Mr. Browne the right to quote this case as one of conversion from a benign into a malignant growth.

Concerning the third case, Mr. Browne says *verbatim* as follows:

“A third very striking example is one also exhibited at the Pathological Society of London (*Pathological Society's Transactions*, vol. xxi, 1870, p. 51) as a papilloma of the larynx, but being attached to the pharyngeal aspect of the cricoid cartilage,

* *Op. cit.* Case 88, p. 186.

† *Manual of Diseases of the Throat and Nose*, vol. i, 1880, p. 330.
[The number of the page is wrong; it ought to be 339.—F. S.]

it has already been considered by the present writer under the more appropriate heading of pharyngeal neoplasms. This growth was believed by Mackenzie to be benign, an opinion which was confirmed by the Morbid Growths Committee; but this also was described and again figured by him ten years later as a malignant sarcoma " *

With regard to this case I beg to observe:

1. That the growth was admitted by Mr. Browne himself not to be an intralaryngeal one at all, and that any reference to it in the present connection therefore is absolutely misleading.

2. That the case was *not* exhibited, as Mr. Browne tells his readers, as a "papilloma of the larynx," but that its title, as given by Sir Morell Mackenzie himself (*Trans. of the Pathological Society*, vol. xxi, p. 53), is Large Tumor removed from the Posterior Surface of the Cricoid Cartilage.

3. That in Mackenzie's description of the case there is no word to be found as to his "belief that it was benign," as asserted by Mr. Lennox Browne.

4. That the report of the committee appointed, signed by Mr. Howard Marsh and Dr. Moxon, with regard to the histological structure of the growth, refers to the fact that the "central part of the papillæ is made up of a richly nucleated tissue, the nuclei being not more than a quarter of the size of those of the epithelial elements; fibrils connect these and blend to form a sarcoous tissue (?) in which large blood-vessels are imbedded," and then goes on to say: "From a structural point of view we should call the growth a papilloma; the transitional forms between epithelium and sarcoous tissue (growing alveolar in the sub-epithelial portion of the growth) throw doubt on the simplicity of the plan and raise proportional probabilities of its recurrence."

* *Op. cit.*, p. 350.

(The sarcous tissue in the center of the papillæ is also figured in Plate I, Fig. 1, of the volume just quoted.)

The reader, therefore, will be able to judge for himself how far Mr. Browne's description of this case as a very striking example of the conversion of a papilloma into a sarcoma is justified.

Mr. Browne continues (*loc. cit.*, p. 769):

"It was the knowledge of the after history of these cases as well as one or two others of the same series (the details of which have not been published) that at first awoke my mind to the possibility of the conversion of benign into malignant growths." . . .

I have, I think, shown that these statements are absolutely incompatible with those of Sir Morell Mackenzie himself and with the facts of the cases reported; and I think it simply right in conclusion of this part of my paper to emphasize the fact that Mr. Browne, who has more than once been challenged to substantiate his assertions, and who at last, in 1887 (*British Medical Journal*, 1887, vol. i, p. 1316), gave his own list of the instances in question, has neither in that list nor on any other occasion in the *twenty-three* years which have elapsed since the publication of Sir Morell Mackenzie's first work, *once* claimed the cases to which he now attaches so much importance.

Now, however, that Sir Morell Mackenzie is gone and can no longer protest against the unwarrantable use made of his cases in clear contradiction to his own plain statements, Mr. Browne attempts to play him out, not merely against myself, whose views on this whole question Sir Morell had so unreservedly accepted (see above), but also against the accumulated experience of the great majority of the leading laryngologists of the world, collected nearly twenty years after the publication of Mackenzie's essay.

II.

After having utilized Sir Morell Mackenzie's cases in the manner described, Mr. Browne goes on to claim a case reported by Dr. David Newman (*British Medical Journal*, vol. i, 1889, p. 133) as "very striking in the direct relationship between the operation and the malignant transformation." Dr. Newman himself, as will be seen from his description in the *British Medical Journal*, brought forward this case, *not* as an example of the conversion alleged by Mr. Browne, but with the view of showing that "while conscious of the value of removing portions of a laryngeal neoplasm for diagnostic purposes, the proceeding should not be resorted to in cases suspected to be cancer [! F. S.], unless the patient is willing to have a radical operation performed immediately that the diagnosis has thus been completed." Inasmuch, however, as Mr. Browne would certainly have been entitled to draw a conclusion from a case different from that of the observer himself, no objection could be raised against his interpretation, if he had not unfortunately had recourse to a proceeding which can not be otherwise characterized than as a *direct perversion* of Dr. Newman's statements.

Mr. Browne (*loc. cit.*, p. 769) quote's Newman's description as given in the *British Medical Journal*, and concludes this by saying *verbatim* (*ibid.*):

"The reporter, *whose exact words have been quoted* [the Italics are my own—F. S.], deduces from this case the conclusion," etc.

The crucial sentence in the quotation is in Newman's words the following:

"The subsequent course of the case proved them [viz., some enlarged lymphatic glands—F. S.] to be carcinomatous in their nature, and the growth within the larynx, which on examination of the first specimen was believed to be a papil-

loma, ultimately on examination of subsequent specimens proved to be an epithelioma, and the patient died from the disease."

On comparing, however, the original sentence in the *British Medical Journal* with that given in Mr. Browne's description, the reader will find that for the word "believed" Mr. Browne has *simply substituted* the word "demonstrated," and thereby entirely altered the sense intended by the author! The substitution is maintained in the concluding sentence of the paragraph referring to Dr. Newman's paper, in which Mr. Browne again asserts that the conclusion of the diagnosis was supposed to have "demonstrated" in this case the innocent nature of the growth. On the strength of this manipulation Mr. Browne dares to claim in his concluding paragraph on the next page that to his list of more or less willing adherents to his conclusions must now be added Dr. David Newman's name, together with my own.

III.

"But the strongest case of all," Mr. Browne continues (*loc. cit.*, p. 770), "is one related by Semon himself, and already referred to under the head of benign angeiomata. In this case the transformation is so vividly illustrated that details of the subsequent history are most instructive, and the more so since they have not appeared in the journal in which the case was first reported. In the opinion of Massei and Malebranc, the growth was 'an angioma, possibly of ancient date but of recent development.' Semon, in his clinical account of the tumor, remarks: 'There was no enlargement of the glands in the neck and no evidence of malignancy; in short, I entirely agreed, from what I had read in laryngeal text-books of that extremely rare form of laryngeal tumor—angioma—but of which I had never seen an instance, that the growth was in all probability of this character.' A supplemental report in another journal states that the tumor, which on removal by the galvano-cautery snare was found to be an innocent papilloma surrounded by blood-clot, recurred four months and a half afterward, with

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the same external appearances. The new tumor was removed in its greatest part *per vias naturales*, and microscopic examination revealed that it was of the same nature as the original, but near the base existed epithelial cones projecting into the tumor.

"After Mr. Shattock and Mr. Butlin had pronounced the diagnosis of malignancy, the rest of the neoplasm was removed by subhyoidan pharyngotomy. On the evening of the fourth day after operation, the patient died comatose. Further examination of the tissue removed by the external operation left no doubt as to its malignant nature.

"Whether, in this or any other cases, the malignant transformation be the result of irritation caused by more or less partial evulsion, or whether it be that some of the papillomata, adenomata, or angio-myxomata of the larynx are to be classified under the head of 'quiet cancers,' the fact remains that instances of the malignant conversion of each of these varieties of growths (within the larynx) have been admitted by Schnitzler, Seiler, Seifert, Solis-Cohen, Tauber, Wagner, Jarvis, Morelli, Blanc, and others, and to this list of more or less willing adherents to the author's conclusions must now be added the names of Felix Semon and David Newman."

It is not easy to correct in a few words the misrepresentations of which this whole description is made up. The facts are simply as follows: The patient in question was sent to me by Dr. Malbranc, of Naples, with a letter in which that gentleman stated that he and Professor Massei, of Naples, had arrived at the diagnosis of angioma of the larynx. My own examination appeared to fully corroborate that result. Even after removal the growth looked entirely like an angioma, and Mr. Shattock and myself were not a little surprised when microscopic examination revealed that it was an apparently typical papilloma incased within an extravasation of blood. The coagulum had entirely concealed the cauliflower-like proper tissue of the tumor, and had given it the appearance of a globular mamil-

lated growth. The proper tissue of the tumor was remarkable for its delicacy, and in this resembled the papillomata of the bladder rather than those commonly met with in the upper air passages. (This last sentence is quoted from our first description of the case in the *Transactions of the Pathological Society of London*, vol. xlii, 1891, p. 392.) Our final conclusions, when reporting this case to the Pathological Society of London, were *verbatim* (*loc. cit.*) as follows :

"1. It is extremely rare to find a papilloma springing from the aryteno-epiglottidean fold unless there be almost a universal papillomatous disease of the laryngeal mucous membrane. In the large number of papillomata which I [F. S.] have seen I have never come across a solitary papilloma in a similar situation.

"2. The occurrence of spontaneous hæmorrhage from a laryngeal papilloma is, so far as our experience and knowledge of laryngological literature go, unique. Although analogous growths in the bladder regularly give rise to spontaneous hæmorrhage, no single instance of a similar occurrence in the larynx has to our knowledge ever been described.

"3. The formation of a complete casing of blood-clot about a papilloma, so changing its clinical character and simulating the appearance of an angioma, is equally unique, and will have to be kept in view by future observers."

At the time of our first description there was no evidence, either clinical or histological, of this growth being malignant, and we therefore did not refer to that contingency. Nevertheless, in view of the patient's age, the unusual situation of the growth, and the occurrence of the spontaneous hæmorrhages, we considered it more prudent not to commit ourselves to too definite an opinion as to the actual nature of the growth, and therefore, instead of describing it as an Unusual Case of Papilloma of the Larynx, or giving it a similar title which would have bound us to

the opinion that the growth belonged to the category of benign laryngeal tumors, deliberately chose the uncompromising title, Anomalous Tumor of the Larynx, under which it is published in the Pathological Society's *Transactions*.

From the foregoing facts it is obvious that Mr. Browne had *no right whatever* to speak of this case as one of "benign angioma." It has *never* been described under that title, and Mr. Browne has simply availed himself (*loc. cit.*, p. 760) of the fact honestly recorded in the clinical history—viz., that the growth had been originally mistaken for an angioma—to inform his readers that the "microscopic investigation entirely upset the diagnosis formed after laryngoscopic observation." In both his descriptions, however, he has absolutely suppressed not only our final conclusions, but above all the significant fact that already in our very first description we had given our communication the title of Anomalous Tumor of the Larynx, a fact which would have shown every unbiased reader of Mr. Browne's descriptions that the authors did not wish to commit themselves to any definite opinion as to the histological character of the growth.

This suppression is bad enough, but what follows is much worse. Mr. Browne describes the further history of the case from a brief preliminary report given in the *Centralblatt für Laryngologie*, etc., seven months after our first description,* and winds up not merely with the assertion, taken by him as an indisputable *fact*, that in this case a transformation had occurred, but with the simply incredible declaration that I myself must now be added to his list of more or less willing adherents to his conclusions. Considering that I have devoted an enormous deal of labor,

* A full description of the further history of the case and of the histological features of the growth will be published in the forthcoming volume of the *Transactions of the Pathological Society of London*.

with the assistance of most of the leading laryngologists of the world, in proving to the satisfaction of probably every laryngologist in the world, except Mr. Lennox Browne, that his so-called conclusions are utterly untenable, this last declaration in itself surpasses in boldness of conception all his previous achievements in that direction; but what will the reader say when he learns that the annotation in the *Centralblatt* from which Mr. Browne has culled his description of the further history of the case ends *verbatim* with the following sentence (*Centralblatt*, vol. viii, p. 318):

“That the new growth in this case was *primarily* [this word is printed in Italics also in the original] malignant, and can not in any way be looked upon as an example of transformation of a benign into a malignant tumor, appears to be unquestionable, and finds further corroboration by the various points enumerated above.”

(“*Dass die Neubildung in diesem Falle primär bösartig war, und nicht etwa als Beispiel des Uebergangs einer gutartigen in eine bösartige Geschwulst betrachtet werden kann, ist wohl unzweifelhaft und findet durch die genannten Momente weitere Stützen.*”)

Mr. Browne *calmly suppresses this entire sentence*, and on the strength of his suppression dares to claim me as an adherent of his views!

When the sequel to the case was in December last brought before the Pathological Society of London, Mr. Browne in the discussion at first defended his views. But when all the speakers in the discussion—i. e., Messrs. Butlin, Victor Horsley, and Bowlby—had expressed their agreement with Mr. Shattock's and my own views as to the primary malignancy of the growth, and after Mr. Shattock had once more from the histological point of view shown that it was simply impossible to come to a conclusive opinion as to the histological character of the growth from the micro-

scopic examination of the projecting part first removed, Mr. Browne suddenly declared (*British Medical Journal*, December 23, 1893, p. 1337) that "after the record of the subsequent histological examination he withdrew his previous statements as to the present case being an instance of the transformation of a benign into a malignant formation."

Be it observed this was "the strongest case of all" (Lennox Browne, *loc. cit.*, p. 770), and the one on the strength of which Mr. Browne, in a manner fortunately almost unheard of in scientific controversies, dared to misrepresent the opinions which I have unwaveringly held since, in 1878, I first took part in the discussion.

How bad must a cause be when it requires to be defended by such means as those employed by Mr. Lennox Browne!

39 WIMPOLE STREET, CAVENDISH SQUARE, C. T.

APPENDIX.

Dr. Felix Semon has submitted to me the foregoing paper in manuscript, and I desire to say that my views regarding the possibility of malignant transformation of benign tumors of the larynx are the same as his own, and not, as Mr. Browne assumes, that I accept the conclusion he has come to. When Mr. Browne succeeds in proving by facts, not by misquotations, that benign growths are liable to undergo malignant transformation, then I may change from my present position, which is, first, that Mr. Browne has entirely failed to prove that a benign growth is likely to undergo malignant transformation as a consequence of intralaryngeal interference; second, that he has absolutely no right to claim me as an adherent to the opinions expressed by him; and third, that the facts published by authors are not consistent with the theory he tries to demonstrate.

DAVID NEWMAN.

The New York Medical Journal.

A WEEKLY REVIEW OF MEDICINE.

EDITED BY

FRANK P. FOSTER, M.D.

THE PHYSICIAN who would keep abreast with the advances in medical science must read a *live* weekly medical journal, in which scientific facts are presented in a clear manner; one for which the articles are written by men of learning, and by those who are good and accurate observers; a journal that is stripped of every feature irrelevant to medical science, and gives evidence of being carefully and conscientiously edited; one that bears upon every page the stamp of desire to elevate the standard of the profession of medicine. Such a journal fulfills its mission—that of educator—to the highest degree, for not only does it inform its readers of all that is new in theory and practice, but, by means of its correct editing, instructs them in the very important yet much-neglected art of expressing their thoughts and ideas in a clear and correct manner. Too much stress can not be laid upon this feature, so utterly ignored by the “average” medical periodical.

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